

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RUDOLF ECKARDT and HANS-JOACHIM JANSCH

Appeal No. 2001-2585
Application No. 09/447,490

MAILED

APR 10 2003

ON BRIEF

**PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES**

Before WARREN, WALTZ, and POTEATE, **Administrative Patent Judges**.

WALTZ, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 2 through 8, which are the only claims pending in this application.¹ We have jurisdiction pursuant to 35 U.S.C. § 134.

¹ Subsequent to the final rejection, an amendment to claim 8 was entered (see the amendment dated Mar. 20, 2000, Paper No. 6, entered as overcoming the final rejection of claim 8 under 35 U.S.C. § 112, ¶2, as noted in the Advisory Action dated May 10, 2000, Paper No. 7). We note that appellants' Substitute Brief dated Oct. 2, 2000, Paper No. 16, contains claim 9 in its Appendix and indicates that claim 9 is allowable claim 6 rewritten in independent form (Brief, paragraph bridging pages 1-2). We also note that the examiner has agreed with the status of the claims as set forth in this Brief (Answer, page 2). However, we do not find any amendment proposing a new claim 9 nor any physical entry of this claim into the record. Therefore we consider only claims 2 through 8 as pending in this application, as found in the record.

According to appellants, the invention is directed to a single step process for producing carbamazepine by reacting iminostilbene with an alkali cyanate in an acidic medium consisting of acetic acid or a mixture of acetic acid with water or alcohol (Brief, page 2).² Appellants state that the claims on appeal "are in a single group that stands together" (Brief, page 3). We construe this statement as meaning the claims stand or fall together since there are no separate arguments in the Brief to any claim other than claim 8. See 37 CFR § 1.192(c)(7)(2000) and *In re McDaniel*, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002). Therefore we select independent claim 8 from the grouping of claims and decide the ground of rejection in this appeal on the basis of this claim alone. Illustrative independent claim 8 is reproduced below:

8. A process for producing carbamazepine which comprises reacting iminostilbene with an alkali cyanate in an acidic medium consisting of acetic acid, or a mixture of acetic acid with water, or with alcohol or with an aqueous alcohol, and recovering the resulting carbamazepine.

²All reference to and citation from the Brief refers to the Substitute Brief dated Oct. 2, 2000, Paper No. 16.

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The examiner has relied upon the following reference as evidence of obviousness:³

Acklin et al. (Acklin) EP 277,095 A1 Aug. 08, 1988
(published European Patent Application)⁴

The claims on appeal stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as unpatentable over Acklin (Answer, page 6). We reverse the examiner's rejection based on section 102(b) but affirm the examiner's rejection based on section 103(a) essentially for reasons stated in the Answer and set forth below. Therefore the decision of the examiner is affirmed.

OPINION

As noted by the examiner (Answer, pages 4-5), this application is a continuation of application no. 08/275,025, in which a merits panel of this Board affirmed the examiner's rejection of claims 1 through 7 under 35 U.S.C. § 103 over Acklin

³The examiner has also relied upon four textbook references as listed on page 3 of the Answer. However, in view of our decision *infra*, a discussion of these references is unnecessary.

⁴As noted by the examiner (Answer, pages 3 and 5), this document was originally in the German language and a full English translation (PTO 95-4841) was relied upon in parent application no. 08/275,025 (Appeal No. 1996-1528, decision mailed Oct. 28, 1999). We again rely upon a full English translation of this document (PTO 95-4841), but in light of USPTO 2000-2843, the statement of Inspection/Quality Control by Mr. John Koytcheff, all now of record.

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(Appeal No. 1996-1528, decision mailed Oct. 28, 1999). As also discussed by the examiner (Answer, page 4), claim 8 on appeal differs from claim 1 in the prior appeal by, *inter alia*, insertion of the phrase "an acidic medium consisting of" before "acetic acid" in line 2 of claim 8.

The examiner finds that Acklin discloses conversion of iminostilbene to carbamazepine by reaction with cyanic acid, where the cyanic acid is produced from sodium cyanate and acetic acid (Answer, pages 6-7). From these findings, the examiner concludes that "all elements of applicants' [sic] process are present" as disclosed by Acklin (Answer, page 8). Alternatively, the examiner concludes that appellants' process is obvious "for reasons affirmed by the Board of Patent Appeals and Interferences (Appeal # 95-4841) [sic, Appeal No. 1996-1528]." Answer, page 9. The examiner determines that the "new 'acidic medium' language, not present in the 08/275,025 application, does not distance applicants [sic] claims from the reference" (*id.*).

Appellants argue that the claims on appeal recite a single step process which is a reaction between only alkali cyanate,

iminostilbene, and acetic acid "and **nothing else**" (Brief, page 3). Appellants also argue that claims 22-24 of Acklin use acetic acid but also require 5-40% excess sulfuric acid, while the claims on appeal are restricted to acetic acid as the sole acid (Brief, page 4; Reply Brief, page 4).

Implicit in our review of the examiner's anticipation and obviousness analyses is that the claim must first have been correctly construed to define the scope and meaning of any contested limitations. See *Gechter v. Davidson*, 116 F.3d 1454, 1457, 1460 n.3, 43 USPQ2d 1030, 1032, 1035 n.3 (Fed. Cir. 1997). As previously noted in our decision in Appeal No. 1996-1528 (page 4), the transitional term "comprises" opens the claimed process to the inclusion of other steps and ingredients/reactants. See *Exxon Chemical Patents Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555, 35 USPQ2d 1801, 1802 (Fed. Cir. 1995); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981). However, the acidic medium present in the process recited in claim 8 on appeal is restricted to the ingredients listed (i.e., acetic acid alone or with water, alcohol, or water and alcohol) by the closed term "consisting of". See *Vehicular Techs. v. Titan Wheel Int'l*,

Inc., 212 F.3d 1377, 1383, 54 USPQ2d 1841, 1845 (Fed. Cir. 2000).

Therefore the scope of claim 8 on appeal, with respect to the acidic medium employed, has been narrowed from claim 1 of application no. 08/275,025 (see the decision, page 6).

Under section 102(b), anticipation or lack of novelty requires that the prior art reference disclose, either expressly or under the principles of inherency, every limitation of the claim. *See In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). In view of our claim construction discussed above, we determine that Acklin does not describe every claim limitation with the specificity required to support a rejection for anticipation under section 102(b). The examiner cites claim 14 of Acklin as support for the rejection, finding that this claim describes the use of acetic acid as the "acidic agent," concurrently used as a solvent (Answer, page 6). As described in claims 5 and 6 of Acklin, the cyanic acid is released and used "without isolation" through acidic treatment of "an cyanuric [sic, a cyanic] acidic salt" (Acklin, page 14). Therefore, the claims the examiner relies upon do not specify that the cyanic acid salt is an alkali cyanate, as required by claim 8 on appeal.

Thus we cannot sustain the examiner's rejection based on 35 U.S.C. § 102(b) over Acklin.

However, Acklin discloses the reaction of iminostilbene with cyanic acid to produce carbamazepine in one stage (pages 1-2), where the cyanic acid is produced without isolation by treating sodium or potassium cyanate with an acid such as acetic acid (pages 3, 4, 14 and especially page 7). Accordingly, we agree with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in this art in view of the Acklin disclosure.

As discussed above, appellants argue that the claims are limited to the reaction of an alkali cyanate, iminostilbene, acetic acid, and nothing else (Brief, page 3). This argument is not well taken in view of our claim construction above, namely the use of the transitional term "comprises" opens the claimed process to additional steps and ingredients. However, appellants are correct in their claim interpretation that claim 8 on appeal is restricted to an acidic medium of acetic acid (or acetic acid with water, alcohol, or mixtures of alcohol and water) (Brief, page 4; Reply Brief, pages 2 and 4).

Appellants argue that Acklin describes obtaining cyanic acid by liberating it from the alkali cyanate with an acid that is stronger than acetic acid, and acetic acid cannot liberate cyanic acid from its salts (Brief, pages 3-5; Reply Brief, pages 2 and 5). This argument is not persuasive since Acklin teaches that acidic agents which can be proton donors suitable for the release of the cyanic acid include acetic acid (Acklin, page 7, first full paragraph). Although Acklin teaches that it is "advantageous" to use small amounts of sulfuric acid with the acetic acid to release the cyanic acid (*id.*), the reference still suggests the use of acetic acid alone to release the cyanic acid from its salts. All disclosures of the prior art, including unpreferred embodiments, must be considered for what they would have suggested to one of ordinary skill in the art. See *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); *In re Mills*, 470 F.2d 649, 651, 176 USPQ 196, 198 (CCPA 1972).

Appellants argue that the reactions of the claims of Acklin and the claims on appeal are between entirely different reaction partners, with no cyanic acid being produced by the claimed process (Brief, page 3 and 5; Reply Brief, pages 1 and 3). This

argument is not persuasive since Acklin teaches that the cyanic acid is liberated "without isolation" and therefore the reaction of Acklin proceeds with an iminostilbene, an alkali cyanate, and an acid which may be acetic acid (see claims 5 and 6 of Acklin). Therefore Acklin discloses the same reactants as recited in claim 8 on appeal.

Appellants are correct that claims 22 and 24 of Acklin, as well as the examples, do not disclose or suggest the process of claim 8 on appeal (Brief, page 4; Reply Brief, page 4). In view of our claim construction discussed above, the use of sulfuric acid with acetic acid as the acidic agent/medium is not within the scope of claim 8 on appeal. However, Acklin cannot be limited to his examples but is available for all that the reference discloses and suggests to one of ordinary skill in this art. See *In re Widmer*, 353 F.2d 752, 757, 147 USPQ 518, 523 (CCPA 1965).

For the foregoing reasons and those stated in the Answer, we determine that the examiner has established a *prima facie* case of obviousness in view of the reference evidence. Based on the totality of the record, including due consideration of

appellants' arguments, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of section 103(a). Accordingly, the examiner's rejection of claims 2-8 under 35 U.S.C. § 103(a) over Acklin is affirmed.

OTHER ISSUES

As discussed above, it appears that claim 9 is not pending in this application. In the event of further or continuing prosecution of this application with the introduction of claim 9 as written in the Appendix to the Brief, the examiner should consider the patentability of this claim under both 35 U.S.C. § 112, ¶2, and 35 U.S.C. § 103(a). Under the second paragraph of section 112, the examiner should consider the contradictory terms that indicate the reaction is "in an aqueous solution" (line 2) but in an acidic medium which may be acetic acid alone (line 3). Under section 103(a), the examiner should consider that claim 9 as written specifies no amounts and therefore could be construed as containing such small amounts of water that the reaction would be "mostly water...free" as taught by Acklin (page 5, lines 1-2). See *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

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SUMMARY

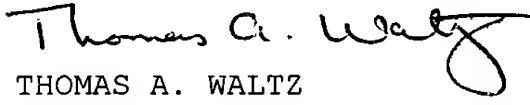
The examiner's rejection of claims 2-8 under 35 U.S.C. § 102(b) over Acklin is reversed.

The examiner's rejection of claims 2-8 under 35 U.S.C. § 103(a) over Acklin is affirmed.

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED


CHARLES F. WARREN)
Administrative Patent Judge)
)

THOMAS A. WALTZ)
Administrative Patent Judge)
)

LINDA R. POTEATE)
Administrative Patent Judge)

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